

CLAIMS

What is claimed is:

1. A recordable information storage medium comprising:
a lead-in area;
a user data area; and
a lead-out area,
wherein compatibility information about whether the information storage medium is compatible with a drive following a version of standards older than that of the information storage medium is recorded in at least one of the lead-in and lead-out areas.
2. The information storage medium of claim 1, wherein when the information storage medium is operable in a drive following an older version of standards, the information storage medium stores information about an optimal writing pattern.
3. The information storage medium of claim 1, wherein the information storage medium further stores strategy information about which one of a multi-pulse write strategy and a single-pulse write strategy is used to record data.
4. The information storage medium of claim 1, wherein at least one of the lead-in and lead-out areas includes a reproduction-only area, and the compatibility information is recorded in the reproduction-only area.
5. The information storage medium of claim 4, wherein the reproduction-only area is a disk control data zone which stores disk-related information used to control the information storage medium.
6. The information storage medium of claim 4, wherein the compatibility information is reproduced as one of a sum signal and a differential signal.

7. The information storage medium of claim 1, wherein at least one of the lead-in and lead-out areas includes a recordable area, and the compatibility information is recorded in the recordable area.

8. The information storage medium of claim 7, wherein the compatibility information is reproduced as a sum signal.

9. The information storage medium of claim 2, wherein information about the optimal writing pattern is recorded in one of the same byte as the byte in which the compatibility information is recorded and a byte different from the byte in which the compatibility information is recorded.

10. The information storage medium of claim 9, wherein, when the information about the optimal write pattern and the compatibility information are recorded in the same byte, they are recorded in a specified byte of the lead-in area.

11. The information storage medium of claim 1, wherein, when 00000000b is recorded in a specified byte, the information storage medium uses an n version of a standard and is not compatible with a drive following a version of the standard older than n, when 00000001b is recorded in the specified byte, the information storage medium uses the n version of the standard and is compatible with a drive following a version of the standard older than the n version and the optimal writing pattern is a first writing pattern type, when 00000010b is recorded in the specified byte, the information storage medium uses the n version of the standard and is compatible with a drive following a version of the standard older than n and the optimal writing pattern is a second writing pattern type, and when 00000011b is recorded in the specified byte, the information storage medium uses the n version of the standard and is compatible with a drive following a version of the standard older than n and the optimal writing pattern is a third writing pattern type.

12. The information storage medium of claim 1, wherein the lead-in area includes: a disk control data zone which stores disk-related information;

a disk test zone which stores information used to test an information storage medium;
a drive test zone which stores information used to test a drive;
a defect management zone which stores information used to remove a defect generated on the information storage medium; and
a reserved area.

13. The information storage medium of claim 12, wherein the lead-in area further includes first and second buffer zones.

14. The information storage medium of claim 13, wherein the lead-in area is divided into a reproduction-only area and a recordable area.

15. The information storage medium of claim 14, wherein the first buffer zone and the disk control data zone are included in the reproduction-only area.

16. The information storage medium of claim 15, wherein the disk test zone, the drive test zone, the defect management zone, the reserved zone, and the second buffer zone are included in the recordable area.

17. The information storage medium of claim 12, wherein the information about writing patterns includes at least one of a recording speed, a reproduction power, an initial pulse time (T_{top}) of a recording pattern, a multi-pulse time (T_{mp}) of a recording pattern, a cooling pulse time of a recording pattern, a writing power (P_w), an erasing power (P_e), and a bias power (P_b).

18. A recordable information storage medium comprising:
a lead-in area;
a user data area; and
a lead-out area,
wherein information about which one of a multi-pulse write strategy and a single-pulse write strategy is used to record data is recorded in at least one of the lead-in and lead-out areas.

19. The information storage medium of claim 18, wherein at least one of the lead-in and lead-out areas includes a reproduction-only area, and the strategy information is recorded in the reproduction-only area.

20. The information storage medium of claim 19, wherein the reproduction-only area is a disk control data zone which stores disk-related information used to control the information storage medium.

21. The information storage medium of claim 19, wherein the strategy information is reproduced as one of a sum signal and a differential signal.

22. The information storage medium of claim 18, wherein at least one of the lead-in and lead-out areas includes a recordable area, and the strategy information is recorded in the recordable area.

23. The information storage medium of claim 22, wherein the strategy information is reproduced as a sum signal.

24. A recordable information storage medium comprising:
a lead-in area;
a user data area; and
a lead-out area,
wherein information about an optimal writing pattern is recorded in at least one of the lead-in and lead-out areas.

25. The information storage medium of claim 24, wherein at least one of the lead-in and lead-out areas includes a reproduction-only area, and the information about the optimal writing pattern is recorded in the reproduction-only area.

26. The information storage medium of claim 25, wherein the reproduction-only area is a disk control data zone included in the lead-in area to store disk-related information.

27. The information storage medium of claim 25, wherein the information about the optimal writing pattern is reproduced as one of a sum signal and a differential signal.

28. The information storage medium of claim 21, wherein at least one of the lead-in and lead-out areas includes a recordable area, and wherein the information about the optimal writing pattern is recorded in the recordable area.

29. The information storage medium of claim 28, wherein the lead-in area includes a recordable reserved area, and the information about the optimal writing pattern is recorded in the recordable reserved area.

30. The information storage medium of claim 28, wherein the information about the optimal writing pattern is reproduced as a sum signal.

31. The information storage medium of claim 24, wherein the information about the optimal writing pattern is recorded as a combination of bits.

32. The information storage medium of claim 24, wherein the information about the optimal writing pattern is recorded together with information about a recording speed of the information storage medium.